

## **AMENDMENT(S) TO THE SPECIFICATION**

**Please replace the paragraph beginning at page 1, line 5, with the following rewritten paragraph:**

The invention relates to a gear pump and particularly to the ring gear thereof and more particularly to a drive connection between the gearwheel of the ring gear and a shaft therein according to the preamble of claim 1.

**Please replace the paragraph beginning at page 1, line 15, with the following rewritten paragraph:**

The rotatable shaft incorporates a portion which extends through a central hole in the gearwheel. Said portion of the shaft incorporates a heel-shaped recess. The gearwheel incorporates a corresponding heel-shaped portion which protrudes into the hole. The heel-shaped recess in the shaft incorporates a planar surface which in the assembled state is designed to abut against a corresponding planar surface of the heel-shaped portion of the gearwheel. By means of the cooperating planar surfaces, the rotary motion of the shaft is converted to a corresponding rotary motion of the gearwheel. The cooperating planar surfaces which are in engagement with one another have an extent along the whole width of the gearwheel. Insufficient matching of said the surfaces to one another or imperfect shape fit of the surfaces may in unfavourable unfavorable circumstances result in the rotary motion being transmitted on a relatively limited region where said the surfaces first come into contact with one another. This motion-transmitting region may be situated at a distance from the axial entre center of the gearwheel. This causes risk of uneven stressing of the gearwheel. Uneven stressing of the gearwheel results in unnecessary wear and the risk of the gearwheel overturning.

**Please replace the paragraph beginning at page 2, line 8, with the following rewritten paragraph:**

This object is achieved with the gear pump of the kind mentioned in the introduction which includes the invention. A gear pump incorporates a ring gear supported for rotation, a gearwheel arranged eccentrically within the ring gear, and a rotatable shaft incorporating a portion which

extends through a hole in the gearwheel. The portion of the shaft includes a first surface, and the gearwheel includes a second surface, which surfaces are so shaped as to allow transfer of rotary motion from the shaft to the gearwheel. The transfer between the first surface and the second surface takes place via a region of contact. The region of contact has an axial extent equal to less than half of the gearwheel's axial extent and the region is divided by a radial plane which extends centrally through the gearwheel. ~~is characterised by the features indicated in the characterising part of claim 1.~~ The region of contact between the shaft and the gearwheel in this case is deliberately made substantially narrower than the width of the gearwheel and is concentrated in the axial middle portion of the gearwheel. Even if the shape fit of the surfaces which form the region of contact is imperfect, transfer of motion between the shaft and the gearwheel will take place within at least the intended region of contact. With advantage, the region of contact has an axial extent which is less than one-quarter of the width of the gearwheel. As the region of contact is relatively limited and is situated substantially centrally, and local transfer of motion cannot take place within the region of contact at a particularly large distance from said radial plane which extends centrally through the gearwheel. The risk of uneven stressing of the gearwheel is thus substantially eliminated.

**Please replace the paragraph beginning at page 2, line 22, with the following rewritten paragraph:**

According to a preferred embodiment of the present invention, said the radial plane divides the region of contact into two substantially equal areas. Such an entirely centred centered region of contact with respect to the gearwheel further eliminates the risk of the gearwheel being unevenly stressed. Similarly exacting requirements concerning the manufacturing tolerances for the surfaces of the shaft and gearwheel via which the transfer of motion takes place are thus obviated since the transfer of motion will in all circumstances take place very close to said the radial plane which extends centrally through the gearwheel.

**Please replace the paragraph beginning at page 5, line 29, with the following rewritten paragraph:**

Fig. 2 depicts a gear pump 15' in more detail. The gear pump 15' incorporates a ring gear 16 which is supported for rotation and which is provided with a multiplicity of internal teeth 16'. A gearwheel 17 is arranged ~~exeentrically~~ eccentrically within the ring gear 16 and incorporates external teeth 17' which are in engagement with the ring gear's internal teeth 16a. A portion of the rotatable shaft 9 extends through a central hole 18 in the gear wheel 17. The rotatable shaft 9 and the gearwheel 17 are connected together so that a rotary motion from the shaft 9 is transmitted to the gearwheel 17. The gearwheel 17 itself transfers said rotary motion to the ring gear 16. In the space between the ring gear 16 and the gearwheel 17 there is a low-pressure side 19 with an inlet pipe for the oil and a high-pressure side 20 with an outlet pipe for the oil. The inlet pipe and outlet pipe are not depicted in the drawing, since the arrangement of such pipes in connection with a gear pump 15' in conventional technology. When the gearwheel 17 and the ring gear 16 rotate, oil will be drawn from the low-pressure side 19 to the high-pressure side 20, thereby imparting to the oil and increased pressure due to the gradually reduced space between the teeth 16', 17'. The ~~pressurised~~ pressurized oil is transferred to the toroidal space 7 when a braking action is required or to a pipe circuit which leads past the toroidal space 7 when no braking action is required.

**Please replace the paragraph beginning at page 8, line 6, with the following rewritten paragraph:**

During operation of the shaft 9 in this case the planar first surface 21' comes into contact with the region of contact *a* of the second surface 22' of the gearwheel 17. The region of contact *a* is thus substantially narrower than the width *b* of the gearwheel 17 and is at the same time concentrated on a region round the ~~entre~~ center of the gearwheel 17. Even if the shape fit of the first surface 21' and the second surface 22' is not entirely optimum, the motions of the shaft 9 are nevertheless guaranteed to be transmitted to the gearwheel 17 via part of the region of contact *a*. As the region of contact *a* is relatively narrow and is arranged centrally on the gearwheel, such local

transmission within the region of contact  $a$  will be guaranteed to take place at a relatively limited distance from said radial place  $c$ .